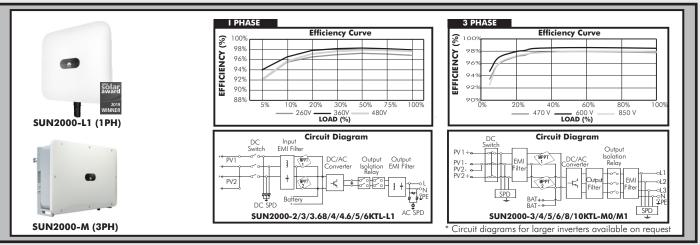




## **SUN2000 SERIES**

Smart Grid Solar PV Inverters



HUAWEI SUN Series Smart String Grid Connect Inverters are of transformerless design for the management of hybrid solar powered PV/AC mains power supply installations. The inverters convert the PV generated DC power to AC, either single or three phase depending on model, and feed to the applied load prioritizing the PV output, supplementing with AC mains power if there is insufficient PV generated output. Inverters are fitted with MPPT trackers to optimise output efficiency and they are designed to be connected in parallel each fed from dedicated solar arrays that can provide power outputs of limitless size. WIFI monitoring devices and Huawei Smartlogger are also provided for monitoring and controlling the power to the grid. Particular features include:-

- Up to 12 MPPT Trackers
- 99.0% maximum efficiency
- 1-phase and 3-phase inverters up to 10kW come with a battery interface for back-up power and are compatible with Huawei Smart ESS (LiFEPO4) Battery 5kWh – 30kWh
- MBUS Supported a communication protocol used between meters and the central data collection system or Pre-Payment unit.
- Fuse free design with AC over current, undervoltage, short-circuit and DC/AC Surge protection
- Provided with Anti-Islanding and DC reverse polarity protection and Insulation Monitoring
- EN/IEC 62109-1, EN/IEC 62109-2, IEC 62116 Certifications.

The following additional accessories are available as options:-

**HUAWEI Smart Logger 3000A with MBUS communication:** The Huawei Smart Logger 3000A is dedicated to monitoring and managing a PV power generating system. It can connect to 80 devices >40kW and centrally monitors information regarding connected solar modules and inverters. Works as export limiter with SmartPower Sensor and other 3rd party meters

**Smart Dongle-WLAN\_FE:** WLAN & Fast Ethernet (FE) communication Module that supports Huawei Inverters and serves as export limiter with SmartPower Sensor. Can be connected to upto 10No. devices < 40kW

HUAWEI SUN Inverters incorporate the latest technologies for optimal PV power generation providing highly efficient, safe & reliable installations with smart operating and grid supporting capabilities that optimizes solar energy utilization in Residential, Commercial and Industrial applications.

## **TECHNICAL SPECIFICATIONS**

Enclosure Class: IP65
Night time Power Consumption: <5.5W

Operating Temp Range:  $-25^{\circ}$  to  $+60^{\circ}$ C

| Model                                   | SUN<br>2000<br>3KTL-L1 | SUN<br>2000<br>3KTL-M1                        | SUN<br>2000<br>5KTL-M1 | SUN<br>2000<br>10KTL-M1 | SUN<br>2000<br>15KTL-M5 | SUN<br>2000<br>20KTL-M5 | SUN<br>2000<br>30KTL-M3 | SUN<br>2000<br>36KTL-M3 | SUN<br>2000<br>50KTL-M3 | SUN<br>2000<br>60KTL-M0 | SUN<br>2000<br>100KTL-M2 | SUN<br>2000<br>115KTL-M2 | SUN<br>2000<br>150K-MGO | SUN<br>2000<br>330KTL-HI |
|---|------------------------|---|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|
| Max. Output &<br>Rated Output<br>Power  | 3,300                  | 3,300   | 5,500                  | 10,000                  | 15,000                  | 20,000                  | 30,000                  | 36,000                  | 50,000                  | 60,000                  | 100,000                  | 115,000                  | 150,000                 | 330,000                  |
| Input AC Voltage,<br>VAC                | 1x240                  | 3x415   |                        |                         |                         |                         |                         |                         |                         |                         |                          |                          |                         |                          |
| Max. PV Input<br>Power, W               | 4,500                  | 4,500 7,500 15,000 22,500 30,000 N/A          |                        |                         |                         |                         |                         |                         |                         |                         |                          |                          |                         |                          |
| Max. PV Input<br>Voltage, VDC           | 600                    | 1,100   |                        |                         | 1,0                     | 80                      | 1,100                   |                         |                         |                         |                          |                          | 1,500                   |                          |
| Operating<br>Voltage Range,<br>VDC      | 90-560                 | 140-980                                       |                        |                         | 160-                    | 950                     | 200-1000                |                         |                         |                         |                          |                          |                         | 500 -1500                |
| Rated Input<br>Voltage, VDC             | 360                    | 600   |                        |                         |                         |                         |                         |                         |                         |                         |                          |                          |                         | 1080                     |
| Start Voltage,VDC                       | 100                    | 200   |                        |                         |                         |                         |                         |                         |                         |                         |                          |                          |                         | 550                      |
| Number of MPPT<br>Inputs                |                        | 2   |                        |                         |                         |                         |                         | 8 12                    |                         | 10 7                    |                          | 7                        | 6                       |                          |
| Maximum Input<br>Current per<br>MPPT, A | 12.5                   | 11  |                        |                         | 22                      |                         | 26                      |                         | 22                      |                         | 26                       | 30                       | 48                      | 65                       |
| Maximum Output<br>Current, A            | 15                     | 5.1   | 8.5                    | 16.9                    | 25.2                    | 33.5                    | 43.3                    | 52                      | 72.2A<br>@400V          | 95.3A<br>@400V          | 160.4A<br>@400V          | 160.0A<br>@400V          | 240.5A<br>@400V         | 216.6A                   |
| Rated Output<br>Voltage, Vac            | 240V                   | 230Vac/400Vac,3W/N+PE 400V/480V,<br>3W+(N)+PE |                        |                         |                         |                         |                         |                         |                         | Ē                       | 800V,3W<br>+PE           |                          |                         |                          |
| Backup Power<br>Output                  |                        | Yes, via l                                    | Back-up Bo             | х                       |                         |                         | N/A                     |                         |                         |                         |                          |                          |                         |                          |
| Peak Efficiency, %                      | 97.3                   | 98.3  | 98.3 98.1 98.2         |                         | 98.3                    |                         | 98.7                    |                         |                         | 98.6                    |                          | 98.4                     | 99                      |                          |
| Dimensions<br>(DxWxH)mm                 | 365x365<br>x156        | 525x470x146.5                                 |                        | 525x470x262             |                         | 640x530x270             |                         | 1075x555x300            |                         | 1035x700x365            |                          | 1000x<br>710x395         | 1048x<br>732x395        |                          |
| Net Weight,Kgs                          | 12                     | 17  |                        |                         | 25                      |                         | 43                      |                         | 74                      |                         | 90                       | 93                       | 99                      | 112                      |